

Refine Search

Search Results -

Terms	Documents
L9 and (electronic\$ with receipt\$)	1

Database: US Pre-Grant Publication Full-Text Database
 US Patents Full-Text Database
 US OCR Full-Text Database
 EPO Abstracts Database
 JPO Abstracts Database
 Derwent World Patents Index
 IBM Technical Disclosure Bulletins

Search: L10

Search History

DATE: Thursday, June 22, 2006 [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<u>DB</u> =PGPB,USPT,USOC,EPAB,JPAB,DWPI,TDBD; <u>THES</u> =ASSIGNEE; <u>PLUR</u> =YES;			
<u>OP</u> =OR			
<u>L10</u>	L9 and (electronic\$ with receipt\$)	1	<u>L10</u>
<u>L9</u>	L5 and ((inventory with updat\$) same (transaction\$ with receipt\$))	6	<u>L9</u>
<u>L8</u>	L5 and (inventory with updat\$ with transaction\$ with receipt\$)	0	<u>L8</u>
<u>L7</u>	L5 and (inventory with updat\$ with transcation\$ with receipt\$)	0	<u>L7</u>
<u>L6</u>	L5 and (iventory with updat\$ with transcation\$ with receipt\$)	0	<u>L6</u>
<u>L5</u>	I3 or L4	141	<u>L5</u>
<u>L4</u>	L2 and @pd<=19990610	110	<u>L4</u>
<u>L3</u>	L2 and @ad<=19990610	102	<u>L3</u>
<u>L2</u>	(transaction same inventory same receipt\$)	418	<u>L2</u>
<u>L1</u>	(transaction same inventory same electron same receipt\$)	0	<u>L1</u>

END OF SEARCH HISTORY

Hit List

First Hit	Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS					

Search Results - Record(s) 1 through 6 of 6 returned.

1. Document ID: US 6594535 B1

L9: Entry 1 of 6

File: USPT

Jul 15, 2003

US-PAT-NO: 6594535

DOCUMENT-IDENTIFIER: US 6594535 B1

TITLE: Material and inventory control system for a demand flow process

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sentences	Attachments	Claims	KM/C	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

2. Document ID: US 6169483 B1

L9: Entry 2 of 6

File: USPT

Jan 2, 2001

US-PAT-NO: 6169483

DOCUMENT-IDENTIFIER: US 6169483 B1

** See image for Certificate of Correction **

TITLE: Self-checkout/self-check-in RFID and electronics article surveillance system

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sentences	Attachments	Claims	KM/C	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

3. Document ID: US 5057677 A

L9: Entry 3 of 6

File: USPT

Oct 15, 1991

US-PAT-NO: 5057677

DOCUMENT-IDENTIFIER: US 5057677 A

TITLE: Transaction monitoring and security control system for the sale and distribution of articles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sentences	Attachments	Claims	KM/C	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	-----------	-------------	--------	------	---------

4. Document ID: US 5055660 A

L9: Entry 4 of 6

File: USPT

Oct 8, 1991

US-PAT-NO: 5055660

DOCUMENT-IDENTIFIER: US 5055660 A

TITLE: Portable transaction monitoring unit for transaction monitoring and security control systems

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn De](#)

5. Document ID: US 4379334 A

L9: Entry 5 of 6

File: USPT

Apr 5, 1983

US-PAT-NO: 4379334

DOCUMENT-IDENTIFIER: US 4379334 A

** See image for Certificate of Correction **

TITLE: Electronic parking meter

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn De](#)

6. Document ID: US 3181124 A

L9: Entry 6 of 6

File: USOC

Apr 27, 1965

US-PAT-NO: 3181124

DOCUMENT-IDENTIFIER: US 3181124 A

TITLE: Data processing system

DATE-ISSUED: April 27, 1965

INVENTOR-NAME: HAMMEL DAVID G

US-CL-CURRENT: 705/21, 340/10.6, 902/39, 902/40, 902/8

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Searches](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn De](#)

[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Generate OACS](#)

Terms	Documents
L5 and ((inventory with updat\$) same (transaction\$ with receipt\$))	6

Display Format: [-] [Change Format](#)

[Previous Page](#)

[Next Page](#)

[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 1 of 6

File: USPT

Jul 15, 2003

DOCUMENT-IDENTIFIER: US 6594535 B1

TITLE: Material and inventory control system for a demand flow process

Application Filing Date (1):19990111Detailed Description Text (95):

The actual calculated quantities of each material are held in an inventory in-process account record in step 912 if the deduct point triggers such relief in step 911. This record will continue to increment when multiple deduct point positions have been defined for a product in a production path. When the final product is completed and ready to be transferred to finished goods inventory, a final report is made. The final report may initiate multiple transactions including: (a) A receipt transaction that increments the inventory record of each material in the finished goods inventory. The location of the material accounting can be defined when entering the completion transaction. The transaction can also update the records in a demand-based management system to identify completions in a daily rate work release record. (b) Multiple relieving transactions can be calculated for each material. These can process to finally update the inventory record for the material as follows: (I) The quantity of each material can be checked against the inventory in-process account record and this record can be relieved for the calculated quantity. (II) If there is insufficient inventory in the in-process account record to satisfy the calculated quantity for the material then that quantity that is present will be relieved and the balance of the quantity processed to relieve the default inventory functional area and location.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 1 of 6

File: USPT

Jul 15, 2003

US-PAT-NO: 6594535

DOCUMENT-IDENTIFIER: US 6594535 B1

TITLE: Material and inventory control system for a demand flow process

DATE-ISSUED: July 15, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Costanza; John R.	Parker	CO		

US-CL-CURRENT: 700/97; 705/28

ABSTRACT:

A material flow design system for a mixed-model demand flow manufacturing line is presented. The material flow system utilizes a replenishment card/replenishment container system of material management. The material flow design system defines the size of replenishment containers and the location of material deduct points in the production path. The material flow design system may further include a design system for designing an inventory control system. The inventory control system involves locating backflush and intermediate backflush locations on the production path and deduct points in the material flow sequence. An inventory monitoring system monitors material flow, deducts material from inventories at deduct points, and credits material to inventory indicated by the deduct points when products produced by the manufacturing line flow through material backflush points defined in the manufacturing line.

11 Claims, 12 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 12

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 2 of 6

File: USPT

Jan 2, 2001

DOCUMENT-IDENTIFIER: US 6169483 B1

**** See image for Certificate of Correction ****

TITLE: Self-checkout/self-check-in RFID and electronics article surveillance system

Application Filing Date (1):19990504Detailed Description Text (12):

After verification that the transaction is valid 42, the store's inventory database 5 is updated 44. The stored inventory database 5 can include stored inventory data consisting of nearly any type of relevant data about the article. The EAS deactivation antenna 16 and associated transmitter is energized 46 to deactivate all of the EAS tags 24 within cavity 4. A message can be flashed 48 on display 8 reminding the user to remove all articles and cards to end the checkout process 49. If desired, a printed receipt 51 of the transaction can be obtained at slot 14.

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 2 of 6

File: USPT

Jan 2, 2001

US-PAT-NO: 6169483

DOCUMENT-IDENTIFIER: US 6169483 B1

**** See image for Certificate of Correction ****

TITLE: Self-checkout/self-check-in RFID and electronics article surveillance system

DATE-ISSUED: January 2, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ghaffari; Touraj	Boca Raton	FL		
Shafer; Gary M.	Boca Raton	FL		
Gruszynski; James R.	Margate	FL		
Parker; Philip J.	Delray Beach	FL		
Copeland; Richard L.	Boca Raton	FL		

US-CL-CURRENT: 340/572.3; 340/568.1, 340/572.1, 361/149, 700/225

ABSTRACT:

A self-checkout/self-check-in and electronic article surveillance (EAS) system is provided. EAS tags and radio frequency identification (RFID) tags are connected to articles for use with the invention. A preferred embodiment for self-checkout includes a housing having a cavity for receiving articles for self-checkout. The cavity is disposed within a deactivation zone. The RFID tags are read, and after verification of an authorized transaction, a deactivation antenna is energized to deactivate the EAS tags, and a stored inventory database is updated. Information about the transaction can be displayed. A preferred embodiment for self-check-in includes an elongated housing into which articles are deposited for return. Once deposited, the articles pass through the housing and out the other end. As the articles are deposited, the RFID tags on the articles are read, the inventory database is updated, and an activation antenna is energized to form an activation zone through which the articles pass as they fall through the housing, thus activating the attached EAS tags. The magnetic fields used for activation and deactivation are magnetic media safe for use with articles containing magnetic recording media.

44 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 11

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 3 of 6

File: USPT

Oct 15, 1991

DOCUMENT-IDENTIFIER: US 5057677 A

TITLE: Transaction monitoring and security control system for the sale and distribution of articles

Application Filing Date (1):19880616DATE ISSUED (1):19911015Brief Summary Text (4):

In many situations, the custody of sales merchandise is entrusted to authorized persons who should be held accountable for the merchandise and the proceeds from sales. One example involves airline onboard sales of duty-free items, beverages such as liquor, and headsets for inflight entertainment. There has been an airline industry problem in recording sales transactions from onboard sales of duty-free items, liquor, and headsets. In fact, the sale of these items onboard airlines represents one of the few instances today where merchandise is sold and cash is received from point-of-sale transactions without any accounting controls. Because of the lack of accurate controls, shrinkage occurs in merchandise and revenue from such sales. Most duty-free items are expensive, and this increases the temptation for dishonesty. If a system were available to ensure security for onboard sales of duty-free items, sales of such items could be greatly increased and produce a new profit center for the airlines. The onboard sale of liquor to passengers produces substantial revenue for the airlines, but such sales annually cost the airlines millions of dollars in lost merchandise and revenue because of difficulties in controlling inventory and accounting for cash receipts. It has been estimated that some airlines each lose several millions of dollars annually because of unrecovered cash receipts from the sales of headsets alone.

Brief Summary Text (9):

The invention is useful as a transaction monitoring and security system for the sale of articles onboard airlines. The containers for storing the articles to be distributed are in the form of beverage and duty-free carts, each having memory means for storing data representing an initial inventory of the articles contained on the cart. Before gaining access to the articles on the cart, the flight attendant first obtains a portable transaction monitoring unit (PTMU) stored in a locked housing in a central computing unit. Alternatively, the locked housing containing the portable transaction monitoring units can be separate from the central computing unit, but access to the housing is gained only through prior communication from the central computing unit. Each PTMU is obtained only after the attendant's personal identification data are communicated to the central computing unit which, in turn, selectively unlocks a door in the housing for providing access to an assigned PTMU. Information communicated to the central computing unit makes a digital data record of the identity of the attendant who has removed the PTMU. The cart which contains articles for distribution also includes locking means to permit removal of articles from the cart only when the PTMU is first operatively mounted on the cart. The cart contains internal digital data storage for information identifying the articles on the cart available for sale and distribution. These data can be off-loaded into the memory within the PTMU. The PTMU has a bar code

scanner and reader for making an internal digital data record of articles removed from the cart when sold. The PTMU also generates an internal digital data record of the cash and credit card receipt information from sales by the attendant. Alternatively, the PTMU can remain on-line to the processor in the cart and all updating of inventory and cash receipts data can take place in data storage within the cart. When sales transactions are completed, transaction data are off-loaded into the PTMU, and the flight attendant closes and locks the cart and returns the PTMU to its proper container in the housing. When the PTMU is placed in the compartment in the housing, it communicates with data storage means in the central computing unit for off-loading the transaction data from the PTMU to the central computing unit to provide a digital data record of sales receipts and articles sold by the attendant.

Detailed Description Text (4):

Referring to the embodiment of FIG. 1, a ground control area 10 of an airport includes a central processing unit 12 which communicates with a ground interface system 14. The ground interface system includes means for storing data base records under the control of the main ground level processor 12. The main processor 12 responds to computer program instructions stored in a read-only-memory (ROM) in accordance with known program control principles to control inputting of data, the processing of data, the storage of data, and the outputting of data. The ground interface system 14 includes a random-access-memory (RAM) for the storage of data and for the transfer of data useful for the flight crew of a particular aircraft on which the transaction monitoring and security control system is used. The ground interface system receives a variety of flight information and data from the main processor and records the information for further use. The ground interface system 14 includes a disk drive system for accepting and recording data on minifloppy disks 16 to be used in a central computing unit (CCU) 18 onboard the aircraft. Once the flight crew present themselves at the cash room at the terminal, the cash room operator initiates the down-loading of data from the ground interface system to the minifloppy disks 16 by keying in a request for down-load of data for that particular flight. Once the down-load of data is complete, and the data are checked for errors automatically, the operator is prompted to remove the now-ready disks 16 and deliver them to the flight crew. The data down-loaded onto the disks can vary; and, in one embodiment, these data include transaction data storage files on a down-load disk 16a for recording transaction data for articles to be sold onboard the aircraft and whose inventory and cash receipts are to be controlled. In the illustrated embodiment, the down-loaded data also include flight schedules on a disk 16d, a passenger list on disk 16c, and currency exchange rates on a disk 16b. Other data useful for onboard data storage and passenger and flight information also can be transferred to these or other disks.

Detailed Description Text (10):

When sales transactions are completed, the cart is locked and the PTMU processing system balances the expected collections against the declared collection indicated by the attendant. Imbalances are indicated. The PTMU also has generated an internal digital data record of the articles sold. The PTMU is returned to the CCU, and all data are down-loaded through the PTMU interface 34 to the memory in the CCU. Data from the CCU are later down-loaded onto the minifloppy disk 16a to provide data for producing an accounting record of cash receipts and inventory for the particular attendant assigned to the inventory contained in the cart.

Detailed Description Text (48):

For sales of merchandise, the user passes the bar-coded item to be sold over the bar code reader on the PTMU, if the PTMU remains coupled on-line to the processor in the inventory cart; or the user may remove the PTMU from the inventory cart and record bar code information from items sold by passing the wand-type bar code scanner over each item removed from the cart. The cost of each item removed is displayed on the PTMU. The user can key in the amount paid and can record credit card sales through the magnetic card reader on the PTMU. If the PTMU remains on-

line to the processor in the cart, the PTMU is simply used to input bar code data into the processor in the cart which reduces the inventory count to keep a current digital data record of current inventory. The PTMU can produce an internal record of all cash sales and credit card sales to record these transactions for revenue accounting. This information also can be transferred to the processor in the cart. Once sales operations are completed, the PTMU down-loads all transaction data (inventory and cash receipts) from data storage in the cart and the PTMU is removed from the cart. The printer on the cart produces a record of all credit card transactions. After the cart is locked, the PTMU is then returned to the CCU, preferably by requiring further ID information from the user's magnetic ID card or PIN number to gain access to the PTMU region of the CCU. Once the PTMU is replaced in its compartment in the CCU, the CCU processor automatically down-loads any data gathered by the PTMU and files that data internally. Data for recording the cart's remaining inventory also can be down-loaded from the memory in the cart. The CCU will print out a record of the total cash receipts, cash balance, and credit card transactions. This receipt along with the cash is placed in an envelope and sealed and signed by the flight attendant and returned to the ground level station.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 4 of 6

File: USPT

Oct 8, 1991

DOCUMENT-IDENTIFIER: US 5055660 A

TITLE: Portable transaction monitoring unit for transaction monitoring and security control systems

Abstract Text (1):

A transaction monitoring and security system records data from the sale of articles and provides security for inventor and sales receipts. The system includes container for storing articles to be distributed, and computer-controlled locking system for controlling access to the articles. The initial inventory of articles stored in the container is bar-coded, and the bar code data provide a digital data record of articles stored and locked in the container. A central computing unit (CCU) includes a housing with locked compartments for receiving and storing a plurality of hand-held portable transaction monitoring units (PTMU's) used to record transaction data from the sale of articles in the container. Each PTMU contains a microprocessor and data storage for communicating with the CCU and with memory in the cart. The PTMU off-loads a digital data record of the inventory of articles stored in the container. A computer-controlled locking system permits removal of articles from the container only in response to a coded input from the PTMU. Transactions involving each article removed from the container for sale and distribution are recorded in the PTMU. After sales transactions are completed, data from the PTMU are off-loaded to the CCU by the PTMU. The PTMU can include a rotatable turret and bar code reading lens with an isolated amplifier inside the turret for amplifying signals generated by the read head for coupling to the microprocessor in the PTMU housing. Electrical shielding in the turret protects the amplifier from receiving interference signals from the electromics in the PTMU.

Application Filing Date (1):19900515DATE ISSUED (1):19911008Brief Summary Text (10):

The invention is useful as a transaction monitoring and security system for the sale of articles onboard airlines. The containers for storing the articles to be distributed are in the form of beverage and duty-free carts, each having memory means for storing data representing an initial inventory of the articles contained on the cart. Before gaining access to the articles on the cart, the flight attendant first obtains a PTMU stored in a locked housing in a central computing unit. Alternatively, the locked housing containing the PTMU's can be separate from the central computing unit, but access to the housing is gained only through prior communication from the central computing unit. Each PTMU is obtained only after the attendant's personal identification data are communicated to the central computing unit which, in turn, selectively unlocks the door in the housing for providing access to an assigned PTMU. Information communicated to the central computing unit makes a digital data record of the identity of the attendant who has removed the PTMU. The cart which contains articles for distribution also includes locking means to permit removal of articles from the cart only when the PTMU is first operatively mounted on the cart. The cart contains internal digital data storage for information identifying the articles on the cart available for sale and

distribution. These data can be off-loaded into the memory within the PTMU. The PTMU has a bar code scanner and reader for making an internal digital data record of articles removed from the cart when sold. The PTMU also generates an internal digital data record of the cash and credit card receipt information from sales by the attendant. Alternatively, the PTMU can remain on-line to the processor in the cart and all updating of inventory and cash receipts data can take place in data storage within the cart. When sales transactions are completed, transaction data are off-loaded into the PTMU, and the flight attendant closes and locks the cart and returns the PTMU to its proper container in the housing. When the PTMU is placed in the compartment in the housing, it communicates with data storage means in the central computing unit for off-loading the transaction data from the PTMU to the central computing unit to provide a digital data record of sales receipts and articles sold by the attendant.

Detailed Description Text (4):

Referring to the embodiment of FIG. 1, a ground control area 10 of an airport includes a central processing unit 12 which communicates with a ground interface system data base records under the control of the main ground level processor 12. The main processor 12 responds to computer program instructions stored in a read-only-memory (ROM) in accordance with known program control principles to control inputting of data, the processing of data, the storage of data, and the outputting of data. The ground interface system 14 includes a random-access-memory (RAM) for the storage of data and for the transfer of data useful for the flight crew of a particular aircraft on which the transaction monitoring and security control system is used. The ground interface system 14 receives a variety of flight information and data from the main processor and records the information for further use. The ground interface system 14 includes a disk drive system for accepting and recording data on minifloppy disks 16 (disks 16a-16d are shown) to be used in a central computing unit (CCU) 18 onboard the aircraft. Once the flight crew present themselves at the cash room at the terminal, the cash room operator initiates the down-loading of data from the ground interface system to the minifloppy disks 16 by keying in a request for down-load of data for that particular flight. Once the down-load of data is complete, and the data automatically checked for errors, the operator is prompted to remove the now-ready disks 16 and deliver them to the flight crew. The data down-loaded onto the disks can vary; and in one embodiment, these data include transaction data storage files on a down-load disk 16a for recording transaction data for articles to be sold onboard the aircraft and whose inventory and cash receipts are to be controlled. In the illustrated embodiment, the down-loaded data also include flight schedules on a disk 16d, a passenger list on disk 16c, and currency exchange rates on a disk 16b. Other data useful for onboard data storage and passenger and flight information also can be transferred to these or other disks.

Detailed Description Text (10):

When sales transactions are completed, the cart is locked and the PTMU processing system balances the expected collections against the declared collection indicated by the attendant. Imbalances are indicated. The PTMU also has generated an internal digital data record of the articles sold. The PTMU is returned to the CCU, and all data are down-loaded through the PTMU interface 34 to the memory in the CCU. Data from the CCU are later down-loaded onto the minifloppy disk 16a to provide data for producing an accounting record of cash receipts and inventory for the particular attendant assigned to the inventory contained in the cart.

Detailed Description Text (48):

For sales of merchandise, the user passes the bar-coded item to be sold over the bar code reader on the he PTMU, if the PTMU remains coupled on-line to the processor in the inventory cart; or the user may remove the PTMU from the inventory cart and record bar code information from items sold by passing the wand-type bar code scanner over each item removed from the cart. The cost of each item removed is displayed on the PTMU. The user can key in the amount paid and can record credit

card sales through the magnetic card reader on the PTMU. If the PTMU remains on-line to the processor in the cart, the PTMU is simply used to input bar code data into the processor in the cart which reduces the inventory count to keep a current digital data record of current inventory. The PTMU can produce an internal record of all cash sales and credit card sales to record these transactions for revenue accounting. This information also can be transferred to the processor in the cart. Once sales operations are completed, the PTMU down-loads all transaction data (inventory and cash receipts) from data storage in the cart and the PTMU is removed from the cart. The printer on the cart produces a record of all credit card transactions. After the cart is locked, the PTMU is then returned to the CCU, preferably by requiring further ID information from the user's magnetic ID card or PIN number to gain access to the PTMU region of the CCU. Once the PTMU is replaced in its compartment in the CCU, the CCU processor automatically down-loads any data gathered by the PTMU and files that data internally. Data for recording the cart's remaining inventory also can be downloaded from the memory in the cart. The CCU will print out a record of the total cash receipts, cash balance, and credit card transactions. This receipt along with the cash is placed in an envelope and sealed and signed by the flight attendant and returned to the ground level station.

[Previous Doc](#)[Next Doc](#)[Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#) [Generate Collection](#) [Print](#)

L9: Entry 4 of 6

File: USPT

Oct 8, 1991

US-PAT-NO: 5055660

DOCUMENT-IDENTIFIER: US 5055660 A

TITLE: Portable transaction monitoring unit for transaction monitoring and security control systems

DATE-ISSUED: October 8, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bertagna; Richard A.	San Dimas	CA		
Berry; Dickey J.	LaVerne	CA		

US-CL-CURRENT: 235/472.02; 235/375, 340/5.92

ABSTRACT:

A transaction monitoring and security system records data from the sale of articles and provides security for inventor and sales receipts. The system includes container for storing articles to be distributed, and computer-controlled locking system for controlling access to the articles. The initial inventory of articles stored in the container is bar-coded, and the bar code data provide a digital data record of articles stored and locked in the container. A central computing unit (CCU) includes a housing with locked compartments for receiving and storing a plurality of hand-held portable transaction monitoring units (PTMU's) used to record transaction data from the sale of articles in the container. Each PTMU contains a microprocessor and data storage for communicating with the CCU and with memory in the cart. The PTMU off-loads a digital data record of the inventory of articles stored in the container. A computer-controlled locking system permits removal of articles from the container only in response to a coded input from the PTMU. Transactions involving each article removed from the container for sale and distribution are recorded in the PTMU. After sales transactions are completed, data from the PTMU are off-loaded to the CCU by the PTMU. The PTMU can include a rotatable turret and bar code reading lens with an isolated amplifier inside the turret for amplifying signals generated by the read head for coupling to the microprocessor in the PTMU housing. Electrical shielding in the turret protects the amplifier from receiving interference signals from the electromics in the PTMU.

4 Claims, 11 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)

[First Hit](#) [Fwd Refs](#)[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)**End of Result Set** [Generate Collection](#) [Print](#)

L10: Entry 1 of 1

File: USPT

Apr 5, 1983

DOCUMENT-IDENTIFIER: US 4379334 A

** See image for Certificate of Correction **

TITLE: Electronic parking meter

Abstract Text (1):

An electronic parking meter (20) is disclosed for unattended supervision and sale of space usage for a lot having a plurality of numbered parking spaces. After parking his vehicle, a customer proceeds to the meter (20) and is sequentially instructed to initially enter his identification data through a key pad (36), then enter coins and/or paper currency in any sequence to purchase space usage, then activate a transaction complete button (46), and then take a printed receipt from a strip printer (48). A computer (52) in the meter (20) computes the length of time purchased from the amount of money entered in accordance with the current rate. A cathode ray tube (34) provides visual verification of the identification data entered, and also displays the amount of money paid, the length of time purchased and expiration time. These totals are cumulatively updated as more money is entered. The printer (48) provides a lot status log in response to coded command for efficient lot inventory. There is also disclosed an electronic lot check register (56) for further efficiency in lot inventory, particularly in updating subsequent inventories.

Application Filing Date (1):19801028DATE ISSUED (1):19830405Brief Summary Text (20):

In accordance with the present invention there is provided a parking meter including a computer to control the meter's operation; an information display or output; a keyboard or other data input. In addition there is included a printer for receipts and/or reports; a coin and/or bill accepter and an optional electronic lot inventory device.

[Previous Doc](#) [Next Doc](#) [Go to Doc#](#)